

REMARKS

Claims 8-15 are pending. Claim 8 has been amended. The Examiner has rejected applicants' claims 8, 10, 12 and 14 under 35 U.S.C. §102 (b) as being anticipated by Kaneko et al. (U.S. Patent No. 5,633,680). The Examiner has indicated that claims 9, 11, 13 and 15 are allowed, stating "the prior art fails to teach or reasonably suggest correcting the reference data of the amount of variation of conversion characteristic mode when a different mode is detected based on the control data of the previous sampling." Applicants have amended independent claim 8, and with respect to such claim, as amended, and its respective dependent claims, the Examiner's rejection is respectfully traversed.

Applicants' independent claim 8 has been amended to better define applicants' invention. More particularly, independent claim 8, which recites a lens control apparatus including a rotary operation member, conversion means for converting a rotating amount of the rotary operation member into an amount of variation of the control data of a positions of a lens, and a conversion characteristic changing means for changing a conversion characteristic mode of the conversion means not to change the position of the lens, has been amended to further recite that restriction to the rotary operation member is abolished. Such a construction is not taught or suggested by the cited art of record.

With regard to claim 8, the Examiner argues:

"Kaneko discloses a rotary operation member (4) for inputting a moving amount of a lens, an output signal characteristics converting means (8) for converting a rotating amount of the rotary member (4) into an amount of movement variation of the control data of the position of a lens, and mode selector means (19) for selecting a mode for operating the lens adjusting apparatus. This mode selector means (19) changes the output signal characteristics converting means to implement a different method of moving the lens to a desired position... Therefore, the mode selector acts as the conversion characteristic changing means. Furthermore, it would make no sense to change the position of the lens

when switching from one mode to another. This would cause the image being picked up to vary sharply or to be completely out of focus... it would be inherent that the position of the lens does not change when switching modes. In Kaneko, the user has the ability to switch from right-handed to a left-handed mode. Clearly, one would not want to change the position of the lens just because they start to use a different hand. Therefore, it would be inherent that the position of the lens does not change when switching modes."

Applicants continue to disagree with the Examiner in this regard. The mode selector switch or means 19 in the Kaneko et al. patent permits switching amongst the right-handed, left-handed and linear operation modes as discussed in the passages of the patent cited by the Examiner. While the conversion characteristic in linear mode differs from that of the right and left-handed modes, the patent states that "[i]n the left-handed operation mode, the output signal characteristics similar to those in the right-handed operation mode I are obtained when the focus operating means 4 is manipulated in the opposite direction." (Column 4, lines 45-49, see also Column 4, lines 56-58, which state "the output signal of the inverting amplifier 14 is inverted again by another inverting amplifier 16 to obtain the output signal characteristics same as curve I").

Accordingly, the right and left-hand modes in the Kaneko et al. patent are not, in fact, different conversion characteristic modes, since they exhibit the same conversion characteristic. Moreover, the fact that these two modes are different from the linear mode is not a sufficient basis for the Examiner's argument of inherency. For an argument of inherency to be made, the resultant inherent operation must necessarily follow and this is simply not the case here. Additionally, the Kaneko et al. patent mentions nothing as to the movement of the lens being stopped when changing modes.

In point of fact it appears that in the device taught by Kaneko et al. patent, and as further described by applicants in the subject application with regard to the prior art, the

focusing lens control voltages in all modes must be made identical at each of a starting end and a terminating end of the entire rotating range of the rotary member (Fig. 4 of the Kaneko et al. patent and FIGS. 22-23 of the subject application). Accordingly with such operation, as mentioned in applicants' specification, when the mode of the focusing lens control voltage is changed at a first rotational angle during operation of the focusing lens, and, after optimum position of the lens is reached at a second rotational angle and an original mode is resumed, focus lens control voltage changes such that the position of the focusing lens will be shifted.

Thus, for all of the above reasons, applicants' amended claim 8 in requiring not changing the position of the lens when the conversion characteristic mode is changed, patently distinguishes over the Kaneko et al. patent.

Moreover, the cited Kaneko et al. patent fails to teach or suggest that restriction to the rotary operation member is abolished, as further claimed in applicants' amended claim 8. According to the applicants' invention, three types of mode change combinations are possible. In particular, as shown in Fig. 15 of applicants' specification, the rotational angle of the rotary member corresponding to the terminating end of the focusing lens changes to one of three different angles depending on the types of mode combinations. By removing the restriction to the rotation of the rotary member, the rotational angle up to the output voltage at the terminating end of the focusing lens can be arbitrarily changed depending on a prestored mode. As a result, even if the normal focusing operation mode is resumed, the position of the focusing lens is never shifted (Application, page 23, line 3 - page 24, line 18). Such a construction is neither taught nor suggested by the cited Kaneko et al. patent.

In summary, therefore, the Kaneko et al. patent does not teach or suggest a lens control apparatus including a conversion characteristic changing means for changing a

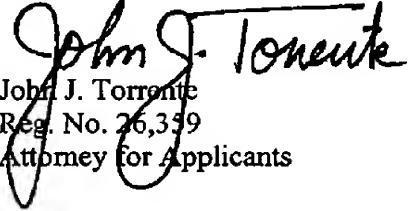
conversion characteristic mode of conversion means not to change the position of a lens, wherein restriction to the rotary operation member is abolished. Applicants' amended independent claim 8, and its respective dependent claims, all of which recite such features, thus patentably distinguish over the Kaneko et al. patent.

In view of the above, it is submitted that applicants' claim 8, as amended, and claims 10, 12 and 14, all of which depend from claim 8, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested. If the Examiner believes that an interview would expedite consideration of this Amendment or of the application, a request is made that the Examiner telephone applicant's counsel at (212) 682-9640.

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